EIC17000

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, EIC 1700 Team Leader 308-4290, CP3/4-3D62

/ol	luntary Results Feedback Form					
AA	I am an examiner in Workgroup: Example: 1713 Relevant prior art found , search results used as follows:					
	☐ 102 rejection					
	☐ 103 rejection					
	Cited as being of interest.					
Helped examiner better understand the invention.						
☐ Helped examiner better understand the state of the art in their technol						
	Types of relevant prior art found:					
	☐ Foreign Patent(s)					
	 Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.) 					
>	Relevant prior art not found:					
Results verified the lack of relevant prior art (helped determine patentability).						
	Results were not useful in determining patentability or understanding the invention.					
Coi	mments:					



Drop off or send completed forms to STIC/EIC1700 CP3/4 3D62

ELHILO 10/049667 8/18/03 Page 1

≃> FILE REG

FILE 'REGISTRY' ENTERED AT 16:15:37 ON 18 AUG 2003
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STRUCTURE FILE UPDATES: 15 AUG 2003 HIGHEST RN 567484-39-3 DICTIONARY FILE UPDATES: 15 AUG 2003 HIGHEST RN 567484-39-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> FILE HCAPLUS

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FILE COVERS 1907 - 18 Aug 2003 VOL 139 ISS 8 FILE LAST UPDATED: 17 Aug 2003 (20030817/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE

L4 STR

213 structures from the query

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L6 213 SEA FILE=REGISTRY SSS FUL L4
L9 89 SEA FILE=HCAPLUS ABB=ON L6

L10 10 SEA FILE=HCAPLUS ABB=ON L9 AND (HAIR OR KERAT?)

=> D L10 1-10 BIB ABS HITIND HITSTR

10 CA references whilety

IIO NIGHTO I OF IO HONDING CONVETCUE OF

L10 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:300263 HCAPLUS

DN 138:308942

TI Substituted 2-aminoalkyl-1,4-diaminobenzene compounds and oxidation dye precursor compositions containing them

IN Chassot, Laurent; Braun, Hans-Juergen

PA Switz.

SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 692,971. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

THE CITY							
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
			-				
PI	US 2003070241	A1	20030417	US 2002-146264	20020515		
	US 6436152	B1	20020820	US 2000-692971	20001020		
	US 2002189033	A1	20021219	US 2002-124149	20020417		
PRAI	DE 1999-19961272	Α	19991218				
	US 2000-692971	A2	20001020				
		_					

OS MARPAT 138:308942

AB The oxidn. hair dye precursor compn., in the form of a soln., cream, emulsion or gel, contains (i) 0.005-20.0% by wt. of at least one coupler compd., and (ii) 0.005-20.0% by wt. of at least one developer compd., that includes at least one substituted 2-aminoalkyl-1,4-diaminobenzene compd. The compn. further comprises at least one direct

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dye. Prepn. of substituted 2-aminoalkyl-1,4-diaminobenzene compds. is
also described. For example, 1,4-diamino-2-(1-butylaminoethyl)benzene
hydrochloride developer was prepd. and formulated into an oxidn.
hair dye precursor compn. with couplers 1,3-dihydroxybenzene,
1,3-diamino-4-(2-hydroxyethoxy)-benzene sulfate, 5-amino-2-methyl-phenol,
or 1-naphthol to give bright light blond, gray-blue, purple, or gray-rose
died hair colors, resp.
ICM A61K007-13
008405000; 008406000; 008415000
62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 25
aminoalkyl diaminobenzene prepn hair dye developer; oxidative
hair dye precursor coupler diaminobenzene developer
Hair preparations
   (dyes, oxidative; oxidative hair dye precursor compns. contg.
   substituted aminoalkyl diaminobenzene compds. developers)
                     95-88-5, 1-Chloro-2, 4-dihydroxybenzene
90-15-3, 1-Naphthol
                                                                106-50-3,
1,4-Diaminobenzene, biological studies
                                         108-45-2, 1,3-Diaminobenzene,
                    108-46-3, 1,3-Dihydroxybenzene, biological studies
biological studies
533-31-3, 3,4-Methylenedioxyphenol
                                     608-25-3, 2-Methyl-1,3-
dihydroxybenzene
                   2835-98-5, 2-Amino-5-methylphenol
                                                       2835-99-6,
                         5697-02-9, 1-Acetoxy-2-methylnaphthalene
3-Methyl-4-aminophenol
6369-59-1, 2,5-Diaminotoluene sulfate
                                       26455-21-0, N-(3-
                           56216-28-5, 3,5-Diamino-2,6-dimethoxypyridine
Dimethylamino) phenylurea
dihydrochloride
                  71005-35-1
                               74918-21-1, 1,3-Bis(2,4-
diaminophenoxy) propane tetrahydrochloride
                                            84540-50-1,
3-Amino-2-chloro-6-methylphenol
                                  90817-34-8, 3-Amino-2-methylamino-6-
                  94158-14-2
methoxypyridine
                               135043-64-0, 4-Amino-2-aminomethylphenol
dihydrochloride
                  159621-77-9
                               164919-03-3
                                              217311-43-8,
2,4-Diamino-5-fluorotoluene sulfate
                                      282542-32-9
                                                     350482-01-8
350482-02-9, 5-Amino-4-fluoro-2-methylphenol sulfate
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
   (oxidative hair dye precursor compns. contg. substituted
   aminoalkyl diaminobenzene compds. developers)
123-30-8, 4-Aminophenol 591-27-5, 3-Aminophenol
RL: COS (Cosmetic use); RCT (Reactant); BIOL (Biological study); RACT
(Reactant or reagent); USES (Uses)
   (oxidative hair dye precursor compns. contq. substituted
   aminoalkyl diaminobenzene compds. developers)
350481-07-1P
               350481-08-2P
                              350481-09-3P
                                             350481-10-6P
                                                             350481-11-7P
350481-13-9P
               350481-15-1P
                              350481-16-2P
                                             350481-17-3P
                                                             350481-18-4P
350481-19-5P
               350481-20-8P
                              350481-21-9P
                                             350481-22-0P
350481-23-1P
               350481-24-2P
                              350481-25-3P
                                             350481-26-4P
350481-27-5P
               350481-29-7P
                              350481-30-0P
                                             350481-31-1P
                                                             350481-32-2P
350481-36-6P
               350481-40-2P
                              350481-41-3P
                                             350481-43-5P
                                                             350481-44-6P
350481-45-7P
               350481-46-8P
                              350481-47-9P
                                             350481-48-0P
                                                             350481-50-4P
                                                             350481-56-0P
350481-51-5P
               350481-52-6P
                              350481-53-7P
                                             350481-54-8P
350481-57-1P
               350481-58-2P
                              350481-59-3P
                                             350481-61-7P
                                                             350481-62-8P
350481-63-9P
               350481-64-0P
                              350481-65-1P
                                             350481-66-2P
                                                             350481-67-3P
                                                             350481-73-1P
350481-69-5P
               350481-70-8P
                              350481-71-9P
                                             350481-72-0P
350481-74-2P
               350481-75-3P
                              350481-76-4P
                                             350481-77-5P
                                                             350481-78-6P
350481-79-7P
               350481-80-0P
                              350481-81-1P
                                             350481-82-2P
                                                             350481-84-4P
350481-85-5P
               350481-87-7P
                              350481-88-8P
                                             350481-89-9P
                                                             350481-90-2P
350481-91-3P
                              350481-93-5P
                                             350481-94-6P
                                                             350481-95-7P
               350481-92-4P
350481-96-8P 350481-99-1P 350482-00-7P
                                        510774-40-0P
510774-41-1P
               510774-42-2P
                              510774-43-3P
                                             510774-44-4P
                                                             510774-45-5P
510774-46-6P
               510774-47-7P
                              510774-48-8P
```

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological

study); PREP (Preparation); USES (Uses) (oxidative hair dye precursor compns. contg. substituted aminoalkyl diaminobenzene compds. developers) 62-53-3, Aniline, reactions 63-68-3, 56-40-6, Glycine, reactions ΙT L-Methionine, reactions 68-12-2, Dimethylformamide, reactions 70-47-375-31-0, Asparagine, reactions 75-04-7, Ethylamine, reactions Isopropylamine, reactions 95-85-2, 4-Chloro-2-aminophenol 96-20-8, 98-03-3, 97-51-8, 2-Hydroxy-5-nitrobenzaldehyde 2-Amino-1-butanol 99-57-0, 2-Amino-4-nitrophenol 99-98-9, 2-Thiophenecarboxaldehyde 4-Amino-N, N-dimethylaniline 100-10-7, 4-Dimethylaminobenzaldehyde 104-86-9, 4-Chlorobenzylamine 100-52-7, Benzaldehyde, reactions 106-49-0, 4-Methylaniline, 106-47-8, 4-Chloroaniline, reactions 107-11-9, Allylamine 107-10-8, Propylamine, reactions reactions 107-15-3, Ethylenediamine, reactions 108-00-9, 2-Dimethylaminoethylamine 109-55-7, 3-Dimethylaminopropylamine 109-83-1, 109-01-3 109-85-3, 2-Methoxyethylamine 110-58-7, 2-Methylaminoethanol 110-73-6, 2-Ethylaminoethanol 110-91-8, Morpholine, Pentylamine 120-57-0, reactions 111-42-2, Diethanolamine, reactions 3,4-Methylenedioxybenzaldehyde 123-08-0, 4-Hydroxybenzaldehyde 123-75-1, Pyrrolidine, reactions 141-43-5, 123-72-8, Butyraldehyde 147-85-3, L-Proline, reactions Ethanolamine, reactions 364-73-8; 1-Bromo-4-fluoro-3-nitrobenzene 364-74-9 364-76-1 437-83-2, 3-Fluoro-2-methoxyaniline 446-35-5 455-14-1, 4-Trifluoromethylaniline 498-62-4, 3-Thiophenecarboxaldehyde 498-63-5, Prolinol 500-22-1, 525-72-4, 1-Methyl-6,7-dihydroxy-1,2,3,4-Pyridine-3-carboxaldehyde tetrahydroisoquinoline 536-21-0, 1-(3-Hydroxyphenyl)-2-aminoethanol 536-90-3, 3-Methoxyaniline 555-16-8, 4-Nitrobenzaldehyde, reactions 616-30-8 587-04-2, 3-Chlorobenzaldehyde 590-86-3 617-89-0, Furfurylamine 765-30-0, Cyclopropylamine 872-85-5, Pyridine-4-carboxaldehyde 1001-53-2, N-Acetylethylenediamine 1117-97-1, O,N-Dimethylhydroxylamine 1121-60-4, Pyridin-2-carboxaldehyde 2038-03-1, 4-Morpholineethanamine 1493-27-2, 1-Fluoro-2-nitrobenzene 2043-61-0, Cyclohexanecarboxaldehyde 2454-37-7, 3-(1-2516-47-4, Aminomethylcyclopropane 2812-47-7. Hydroxyethyl)aniline Prolinamide 2835-95-2, 3-Amino-6-methylphenol 3731-51-9, 2-Picolylamine 3731-53-1, 4-Picolylamine 4214-76-0, 4795-29-3, Tetrahydrofurfurylamine 2-Amino-5-nitropyridine 5036-48-6, 1-(3-Aminopropyl)imidazole 5382-16-1, 4-Hydroxypiperidine 5616-32-0, 6168-72-5, 2-Aminopropanol 6291-85-6, Methylaminoacetonitrile 6315-89-5, 3,4-Dimethoxyaniline 6859-99-0, 3-Ethoxypropylamine 7304-32-7, 2-Fluoro-5-nitrobenzoic acid 3-Hydroxypiperidine 6921-22-8 7663-77-6, 1-(3-Aminopropyl)-2-pyrrolidone 13325-10-5, 4-Aminobutanol 14268-66-7, 3,4-Methylenedioxyaniline 24424-99-5, Di(tert-butyl dicarbonate) 25739-59-7 35303-76-5, 4-(2-Aminoethyl)benzenesulfonamide 51980-54-2, 4-Pyrrolidinobenzaldehyde 40499-83-0, 3-Hydroxypyrrolidine 325953-40-0 68621-88-5 71026-66-9 244104-65-2 325953-41-1 325953-45-5 325953-46-6 325953-48-8 510774-39-7 RL: RCT (Reactant); RACT (Reactant or reagent) (oxidative hair dye precursor compns. contg. substituted aminoalkyl diaminobenzene compds. developers) IT 325953-36-4P 350481-97-9P 350481-98-0P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (oxidative hair dye precursor compns. contg. substituted aminoalkyl diaminobenzene compds. developers) IT 350481-23-1P 350481-99-1P 350482-00-7P RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

ELHILO 10/049667 8/18/03

Page 5

(oxidative hair dye precursor compns. contg. substituted aminoalkyl diaminobenzene compds. developers)

RN 350481-23-1 HCAPLUS

CN 1,4-Benzenediamine, 2-[[(4-aminophenyl)amino]methyl]-, hydrochloride (9CI) (CA INDEX NAME)

●x HCl

RN 350481-99-1 HCAPLUS

CN 1,4-Benzenediamine, N-[(2,5-diaminophenyl)methyl]-2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

●x HCl

RN 350482-00-7 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[(2,5-diaminophenyl)methyl]amino]-, hydrochloride (9CI) (CA INDEX NAME)

$$H_2N$$
 CH_2-CH_2-OH
 NH_2

●x HCl

L10 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN AN 2003:238180 HCAPLUS DN 138:271380

TI Preparation of 2-substituted resorcinol derivatives containing coloring agent as well as new resorcinol derivatives

PA Wella AG, Germany

SO Ger. Gebrauchsmusterschrift, 48 pp.
CODEN: GGXXFR

DT Patent

LA German

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

-----PI DE 20217957 U1 20030327 DE 2002-20217957 20021120

PRAT DE 2002-20217957 20021120

PRAI DE 2002-20217957 OS MARPAT 138:271380

GT

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- A means of the coloring keratin fibers based on a AB developer/generator substance coupling agent combination, is characterized by the fact that it contains at least one resorcinol deriv. I [R1, R2 = H, C1-6-alkyl, C2-6-alkenyl, acetyl, C1-4-alkoxy, C1-4-hydroxyalkyl, C2-4-dihydroxyalkyl, C1-4-alkoxy-C1-4-alkyl, C1-4-hydroxyalkoxy-C1-4alkyl, C1-4-aminoalkyl, C1-4-(dimethylamino)alkyl, C1-4-(acetylamino)alkyl, C1-4-[(tert-butoxycarbonyl)amino]alkyl, C1-4-cyanoalkyl, C1-4-carboxyalkyl, C1-4-(aminocarbonyl)alkyl, pyridyl Me, furfuryl, tetrahydrofurfuryl, methyltetrahydrofurfuryl, (un)substituted pyridyl, Ph, pyrazolyl, piperidinyl, morpholinyl, piperazinyl, pyrrolidinyl; R3 = H, C1-6-alkyl] or its physiol. compatible water-sol. salts. Thus, I [R1 = CH2CH2OMe, R2 = R3 = H] was prepd. from resorcinol, via O-alkylation with ClCH2CH2OMe, Vilsmeier formylation, O-deprotection and reductive amination with MeOCH2CH2NH2. A hair dye was prepd. contq. I [R1 = CH2CH2OMe, R2 = R3 = H] and 2,5-diaminotoluene sulfate (developing agent) giving a medium blond color.
- IC ICM C07C215-52

ICS A61K007-13; C07D213-36; C07D307-00; C07D207-04

- CC 25-10 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds) Section cross-reference(s): 41, 62
- ST resorcinol deriv prepn coloring agent **keratin** fiber; aniline deriv developer coupling agent dye component
- IT Hair preparations

(dyes; prepn. of 2-substituted resorcinol derivs. contg. coloring agent as well as new resorcinol derivs.)

IT Fibers

RL: NUU (Other use, unclassified); USES (Uses)

(keratin, coloring agents for; prepn. of 2-substituted resorcinol derivs. contg. coloring agent as well as new resorcinol derivs.) 89-57-6, 5-Aminosalicylic acid 92-65-9, 4-[Ethyl(2-IT hydroxyethyl)amino]aniline 93-05-0, 4-(Diethylamino)aniline 95-55-6, 95-70-5, 1,4-Diamino-2-methylbenzene 95-86-3, 99-98-9, 4-(Dimethylamino)aniline 101-54-2, 2,4-Diaminophenol 106-50-3, 1,4-Diaminobenzene, biological studies 4-(Phenylamino)aniline 123-30-8, 4-Aminophenol 123-31-9, 1,4-Dihydroxybenzene, biological 399-95-1, 4-Amino-3-150-75-4, 4-(Methylamino)phenol 533-73-3, 399-96-2, 4-Amino-2-fluorophenol fluorophenol 615-66-7, 2-Chloro-1,4-diaminobenzene 1,2,4-Trihydroxybenzene 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 2,5,6-1630-11-1, 1,4-Diamino-3,5-diethylbenzene Triaminopyrimidin-4-(1H)-one 2359-52-6, 4-[Di(2-hydroxyethyl)amino]-2-methylaniline 2835-96-3, 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-2-methylphenol 4318-76-7, 2,5-Diaminopyridine 4-Amino-3-methylphenol 5306-96-7, 5862-80-6, 4-[(2,3-1,4-Diamino-2,3-dimethylbenzene Dihydroxypropyl)amino]aniline 6369-59-1, 2,5-Diaminotoluene sulfate 7218-02-2, 6393-01-7, 1,4-Diamino-2,5-dimethylbenzene 7575-35-1, 4-[Di(2-1,4-Diamino-2,6-dimethylbenzene hydroxyethyl)amino]aniline 17272-83-2, N-Benzylbenzene-1,4-17672-22-9, 2-Amino-6-methylphenol 29785-47-5, diamine 45514-38-3, 4,5-Diamino-1-methyl-1H-4-Amino-2-(methoxymethyl)phenol 58262-44-5, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine sulfate 66566-48-1, 4-[(2-Methoxyethyl)amino]aniline 67199-87-5, 1,4-Diamino-2-(aminomethyl)benzene 70643-19-5, 2,4-Diamino-1-(2hydroxyethoxy) benzene 71411-90-0 73793-80-3, 79352-72-0, 4-Amino-2-1,4-Diamino-2-[hydroxymethyl]benzene (aminomethyl)phenol 93841-24-8, 1,4-Diamino-2-(2-hydroxyethyl)benzene 93841-25-9, (2,5-Diaminophenyl)ethanol sulfate 97902-52-8, 1,4-Diamino-2-(1-methylethyl)benzene 104333-08-6, 4-Amino-2-(2hydroxyethyl)phenol 104333-09-7, 4-Amino-2-(hydroxymethyl)phenol 104752-48-9, 4-[(3-Hydroxypropyl)amino]aniline 105293-89-8, 4-(Dipropylamino)aniline 109942-17-8, 2,5-Diaminobiphenyl 110952-46-0 126335-43-1, 1,4-Diamino-2-(2-hydroxyethoxy)benzene 128729-30-6, 1,3-Bis[(4-aminophenyl)(2-hydroxyethyl)amino]-2-propanol 130582-53-5, 1,4-Bis[(4-aminophenyl)amino]butane 131311-66-5, 4,5-Diamino-1-benzyl-1Hpyrazole 135043-64-0, 4-Amino-2-(aminomethyl)phenol dihydrochloride 155601-16-4, 4,5-Diamino-1-(1-methylethyl)-1H-pyrazole 155601-17-5, 4,5-Diamino-1-(2-hydroxyethyl)-1H-pyrazole 155601-30-2, 157469-53-9, 4,5-Diamino-1-(2-hydroxyethyl)pyrazole sulfate 157469-54-0, 4,5-Diamino-1-[(4-methoxyphenyl)methyl]-1H-pyrazole 4,5-Diamino-1-[(4-methylphenyl)methyl]-1H-pyrazole 157469-55-1, 4,5-Diamino-1-[(4-chlorophenyl)methyl]-1H-pyrazole 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane 168202-61-7, 4-Amino-3-(hydroxymethyl)phenol 181473-60-9, N-[(Furan-2yl)methyl]benzene-1,4-diamine 207568-58-9, 2-[2-(Acetylamino)ethoxy]-1,4-244104-61-8, 1,4-Diamino-2-(thien-2-yl)benzene diaminobenzene 246244-41-7, 1,4-Diamino-2-(thien-3-yl)benzene 251114-07-5, 306959-12-6, 1,4-Diamino-2-(pyridin-3-2,3',5-Triamino-1,1'-biphenyl 329320-36-7, 1,4-Diamino-2-(1yl)benzene **325952-88-3** 337906-36-2, 1,4-Diamino-2-(methoxymethyl)benzene hydroxyethyl)benzene 400058-21-1, 4,5-Diamino-1-pentyl-1H-pyrazole 402559-72-2, N-[(Thien-3-yl)methyl]benzene-1,4-diamine 402559-73-3, N-[(Furan-3-yl)methyl]benzene-1,4-diamine 402559-76-6, N-[(Thien-2-yl)methyl]benzene-1, 4-diamine 402825-68-7,

N-[4-(Pyrrolidin-1-yl)benzyl]benzene-1,4-diamine

503046-72-8,

```
503046-73-9,
     4-(2,5-Diaminophenyl)-2-[(diethylamino)methyl]thiophene
     2-Chloro-3-(2,5-diaminophenyl)thiophene 503046-74-0,
                                                    503046-75-1,
     2,5-Diamino-4'-(1-methylethyl)-1,1'-biphenyl
     1,4-Diamino-2-[(phenylamino)methyl]benzene
                                                  503046-76-2
                                                                503046-96-6
     503047-00-5, 2,5-Diamino-4'-hydroxy-1,1'-biphenyl
                                                         503047-01-6,
     2,5-Diamino-2'-(trifluoromethyl)-1,1'-biphenyl
                                                      503047-02-7,
     2,4',5-Triamino-1,1'-biphenyl
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (developer substance for coloring agent contg. resorcinol derivs.;
       prepn. of 2-substituted resorcinol derivs. contg. coloring agent as
       well as new resorcinol derivs.)
     94564-77-9P
                   503046-49-9P
                                  503046-50-2P
                                                 503046-51-3P
                                                                503046-52-4P
IT
     503046-53-5P, 1-(2,6-Dihydroxybenzyl)piperidin-4-ol
                                                           503046-54-6P
     503046-55-7P
                    503046-56-8P
                                   503046-57-9P
                                                  503046-58-0P
                                                                 503046-59-1P
     503046-60-4P 503046-61-5P
                                 503046-62-6P
                                                503046-63-7P
                    503046-65-9P
                                   503046-66-0P
                                                  503046-67-1P
                                                                 503046-68-2P
     503046-64-8P
     503046-69-3P
     RL: COS (Cosmetic use); PRP (Properties); SPN (Synthetic preparation);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. and color of dyes contg.; prepn. of 2-substituted resorcinol
        derivs. contg. coloring agent as well as new resorcinol derivs.)
IT
     94564-81-5P, 1,3-Dihydroxy-2-(aminomethyl)benzene
                                                         503046-77-3P,
     N-[2-(2,6-Dihydroxybenzylamino)ethyl]acetamide
                                                      503046-78-4P,
     1,3-Dihydroxy-2-[(methylamino)methyl]benzene
                                                    503046-79-5P,
     2-[(2,6-Dihydroxybenzyl)amino]ethanol
                                             503046-80-8P, 1-[2,6-
     Dihydroxybenzyl]pyridin-3-ol
                                    503046-81-9P, [1-(2,6-
     Dihydroxybenzyl)pyrrolidin-2-yl]methanol
                                                503046-82-0P,
                                             503046-83-1P
     1-(2,6-Dihydroxybenzyl)piperidin-3-ol
                                                             503046-84-2P,
     2-(2,6-Dihydroxybenzylamino)propan-1-ol
                                               503046-85-3P
                                                               503046-86-4P
     503046-87-5P
                    503046-88-6P
                                   503046-89-7P
                                                  503046-90-0P
                                                                  503046-91-1P,
     1,3-Dihydroxy-2-[(phenylamino)methyl]benzene 503046-93-3P
     RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (prepn. of 2-substituted resorcinol derivs. contg. coloring agent as
        well as new resorcinol derivs.)
IT
     17272-83-2, N-Benzylbenzene-1, 4-diamine 71411-90-0
     325952-88-3 402825-68-7, N-[4-(Pyrrolidin-1-
     yl)benzyl]benzene-1,4-diamine
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (developer substance for coloring agent contq. resorcinol derivs.;
        prepn. of 2-substituted resorcinol derivs. contg. coloring agent as
        well as new resorcinol derivs.)
RN
     17272-83-2 HCAPLUS
     1,4-Benzenediamine, N-(phenylmethyl)- (9CI) (CA INDEX NAME)
CN
```

RN 71411-90-0 HCAPLUS CN 1,4-Benzenediamine, N-[(4-aminophenyl)methyl]- (9CI) (CA INDEX NAME)

$$H_2N$$
 CH_2-NH NH_2

RN 325952-88-3 HCAPLUS

CN 1,4-Benzenediamine, N-[(2,5-diaminophenyl)methyl]- (9CI) (CA INDEX NAME)

RN 402825-68-7 HCAPLUS

CN 1,4-Benzenediamine, N-[[4-(1-pyrrolidinyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

IT 503046-61-5P

RL: COS (Cosmetic use); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and color of dyes contg.; prepn. of 2-substituted resorcinol derivs. contg. coloring agent as well as new resorcinol derivs.)

RN 503046-61-5 HCAPLUS

CN 1,3-Benzenediol, 2-[[(4-aminophenyl)amino]methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

2 HCl

IT 503046-93-3P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 2-substituted resorcinol derivs. contg. coloring agent as well as new resorcinol derivs.)

503046-93-3 HCAPLUS RN

CN 1,3-Benzenediol, 2-[[(4-aminophenyl)amino]methyl]- (9CI) (CA INDEX NAME)

ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN L10

AN 2002:171836 HCAPLUS

DN 136:236659

Synthesis of N-benzyl-p-phenylenediamine derivatives and their application ΤI in oxidative hair dyes as developers applicant

Chassot, Laurent; Braun, Hans-juergen IN

Wella Aktiengesellschaft, Germany PΑ

PCT Int. Appl., 67 pp. SO CODEN: PIXXD2

DT Patent .

LΑ German

FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE 20020307 WO 2001-EP3121 20010319 WO 2002018318 A1PΙ W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 2001039307 Α5 20020313 AU 2001-39307 20010319 20020618 BR 2001-7154 20010319 BR 2001007154 Α EP 1226107 20020731 EP 2001-913893 20010319 A1

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2002166181 A1 20021114 US 2002-49667 20020101

PRAI DE 2000-10042787 A 20000831 WO 2001-EP3121 W 20010319

OS MARPAT 136:236659

GI

AB The invention relates to coloring agents for keratin fibers contg. N-benzyl-p-phenylenediamine derivs. of general formula (I) and their physiol. compatible water sol. salts, in addn. to novel N-benzyl-p-phenylenediamine derivs. Thus a hair dye contained 1.25 mmol N-((3-hydroxyphenyl)methyl)-1,4-diamino-benzene hydrochloride as developer and 1.25 mmol 1,3-dihydroxybenzene as coupler. Further ingredients were (g): potassium oleate (8% aq.soln.) 1.0; ammonia (22% aq. soln.) 1.0; ethanol 1.0; ascorbic acid 0.3; water to 100.

IC ICM C07C211-51

ICS C07C215-50; C07C217-58; C07D295-12; C07C215-14; C07C233-43

CC 62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 25

Ι

ST N benzyl phenylendiamine deriv developer oxidative hair dye

IT Dyes

(direct; synthesis of N-heteroarylmethyl-p-phenylendiamine derivs. and application in oxidative hair dyes as developers)

IT Hair preparations

(dyes, oxidative; synthesis of N-benzyl-p-phenylenediamine derivs. and application in oxidative hair dyes as developers)

IT 141-86-6, 2,6-Diaminopyridine 5349-76-8, 2,4-Diamino-1-methoxy-5-methylbenzene 28020-38-4, 2,3-Diamino-6-methoxypyridine 83763-47-7, 2-Amino-4-[(2-hydroxyethyl)amino]anisole 90817-34-8, 3-Amino-6-methoxy-2-(methylamino)pyridine 122481-67-8, 2,4-Di[(2-hydroxyethyl)amino]-1,5-dimethoxybenzene 141614-04-2, 2,4-Diamino-1-ethoxy-5-methylbenzene 141614-05-3, 2,4-Diamino-1-(2-hydroxyethoxy)-5-methylbenzene 141922-20-5, 2,4-Diamino-1-fluoro-5-methylbenzene

```
(coupler; synthesis of N-benzyl-p-phenylenediamine derivs. and
       application in oxidative hair dyes as developers)
    83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-
ΙT
    pyrazolone 89-83-8, 5-Methyl-2-(1-methylethyl)phenol
                                             91-68-9, 3-Diethylaminophenol
                 91-56-5, 2,3-Indolinedione
    1-Naphthol
    92-44-4, 2,3-Dihydroxynaphthalene
                                       95-88-5, 1-Chloro-2,4-dihydroxybenzene
    99-07-0, 3-Dimethylaminophenol
                                    108-45-2, 1,3-Diaminobenzene, biological
             108-46-3, 1,3-Dihydroxybenzene, biological studies
                                                                  137-19-9,
    1,5-Dichloro-2,4-dihydroxybenzene 533-31-3, 3,4-Methylenedioxyphenol
    575-38-2, 1,7-Dihydroxynaphthalene
                                        582-17-2, 2,7-Dihydroxynaphthalene
    591-27-5, 3-Aminophenol
                              608-25-3, 1,3-Dihydroxy-2-methylbenzene
    619-05-6, 3,4-Diaminobenzoic acid
                                        770-25-2, 3-[(2-
                               1953-54-4, 5-Hydroxyindole
                                                             2380-84-9,
    Hydroxyethyl)amino]phenol
                      2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole
    7-Hydroxyindole
                                      3131-52-0, 5,6-Dihydroxyindole
    2835-95-2, 5-Amino-2-methylphenol
    5697-02-9, 2-Methyl-1-naphthol-acetate
                                             6201-65-6, 2-Chloro-1,3-
    dihydroxybenzene
                      6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline
    6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene
                                                             7228-00-4,
    2-[(3-Hydroxyphenyl)amino]acetamide 14268-66-7, 3,4-
                           16867-03-1, 2-Amino-3-hydroxypyridine
    Methylenedioxyaniline
    26011-57-4, 6-Amino-3,4-dihydro[1,4](2H)-benzoxazine 26021-57-8,
    3,4-Dihydro-6-hydroxy-1,4(2H)-benzoxazine
                                                29539-03-5,
    5,6-Dihydroxyindoline 39489-79-7, 5-Amino-2,4-dichloro-phenol
    53222-92-7, 3-Amino-2-methylphenol 55302-96-0, 5-[(2-Hydroxyethyl)amino]-
                     61693-42-3, 3-Amino-2,4-dichloro-phenol 70643-19-5,
    2-methylphenol
    2,4-Diamino-1-(2-hydroxyethoxy)benzene
                                            71500-41-9, 4-Amino-2-di[(2-
    hydroxyethyl)amino]-1-ethoxybenzene
                                          71500-42-0, 3-[Di(2-
    hydroxyethyl) amino] aniline
                                76045-64-2, 3-[(2-Aminoethyl)amino]aniline
    78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-methylaminobenzene
    3-[(2,3-Dihydroxypropyl)amino]-2-methylphenol
                                                    80592-81-0,
    3-[(2-Hydroxyethyl)amino]-2-methylphenol 81892-72-0,
    1,3-Di(2,4-diaminophenoxy)propane 84540-48-7, 2,4-Diaminophenoxy acetic
           84540-50-1, 3-Amino-2-chloro-6-methylphenol 86817-42-7,
    2-(4-Amino-2-hydroxyphenoxy)ethanol 94082-77-6, 2,4-Diamino-1,5-di(2-
    hydroxyethoxy) benzene 104752-50-3, 1-(2-Aminoethoxy)-2,4-diaminobenzene
    104752-51-4, 1,2-Dichloro-3,5-dihydroxy-4-methylbenzene 110102-86-8,
    5-Amino-4-chloro-2-methylphenol 111451-24-2, 2,6-Diamino-3,5-
                        115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene
    dimethoxypyridine
    122455-85-0, 5-Amino-4-fluoro-2-methylphenol 137290-78-9,
    5-Amino-4-methoxy-2-methylphenol 139443-57-5, 5-Amino-4-ethoxy-2-
                   142082-56-2, 3-[(2-Methoxyethyl)amino]phenol
                                                                  146658-65-3,
    methylphenol
    5-[(3-Hydroxypropyl)amino]-2-methylphenol 149330-25-6,
    2,6-Bis(2-hydroxyethyl)aminotoluene 168092-23-7, Di(2,4-
    diaminophenoxy) methane
                            207923-07-7, 5-Amino-2-ethylphenol
                                                                  244028-59-9,
    5-[(2-Hydroxyethyl)amino]-1,3-benzodioxole
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
       (coupler; synthesis of N-heteroarylmethyl-p-phenylendiamine derivs. and
       application in oxidative hair dyes as developers)
IT
    7722-84-1, Hydrogen peroxide, biological studies
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (synthesis of N-benzyl-p-phenylenediamine derivs. and application in
       oxidative hair dyes as developers)
    7732-18-5, Water, biological studies 71411-90-0
IT
     402826-44-2 402826-47-5 402826-49-7
    402826-50-0 402826-51-1 402826-52-2
    402826-53-3
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (synthesis of N-heteroarylmethyl-p-phenylendiamine derivs. and
```

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application in oxidative hair dyes as developers)
IT
     5711-79-5P 13174-43-1P 17272-83-2DP,
    N-Benzyl-p-phenylenediamine, derivs. 17272-83-2P
     402825-55-2P 402825-56-3P 402825-57-4P
     402825-58-5P 402825-59-6P 402825-60-9P
     402825-61-0P 402825-62-1P 402825-63-2P
     402825-64-3P 402825-65-4P 402825-66-5P
     402825-67-6P 402825-68-7P 402825-69-8P
     402825-70-1P 402825-71-2P 402825-72-3P
     402825-73-4P 402825-74-5DP, derivs.
     402825-75-6DP, derivs. 402825-76-7P 402825-77-8P
     402825-78-9P 402825-79-0P 402825-80-3P
     402825-81-4P 402825-83-6P 402825-84-7P
     402825-86-9P 402825-90-5P 402825-91-6P
     402825-92-7P 402825-94-9P 402825-95-0P
     402825-96-1P 402825-97-2P 402825-98-3P
     402825-99-4P 402826-00-0P 402826-01-1P
     402826-02-2P 402826-03-3P 402826-04-4P
     402826-05-5P 402826-06-6P 402826-07-7P
     402826-08-8P 402826-09-9P 402826-10-2P
     402826-11-3P 402826-12-4P 402826-13-5P
     402826-14-6DP, derivs. 402826-15-7DP, derivs.
     402826-16-8P 402826-17-9P 402826-18-0P
     402826-19-1P 402826-20-4P 402826-21-5P
     402826-22-6P 402826-23-7P 402826-24-8P
     402826-25-9P 402826-26-0P 402826-27-1P
     402826-28-2P 402826-29-3P 402826-30-6P
     402826-31-7P 402826-32-8P 402826-33-9P
     402826-34-0P 402826-35-1P 402826-36-2P
     402826-38-4P 402826-39-5P 402826-40-8P
     RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (synthesis of N-heteroarylmethyl-p-phenylendiamine derivs. and
        application in oxidative hair dyes as developers)
TT
     90-02-8, 2-Hydroxybenzaldehyde, reactions 100-10-7
     3-Hydroxybenzaldehyde 120-57-0, 3,4-Methylenedioxybenzaldehyde
     122-85-0, 4-Acetamidobenzaldehyde 123-08-0, 4-Hydroxybenzaldehyde
     123-11-5, 4-Methoxybenzaldehyde, reactions 135-02-4,
     2-Methoxybenzaldehyde 139-85-5, 3,4-Dihydroxybenzaldehyde
     2,4-Dinitrobenzaldehyde 555-16-8, 4-Nitrobenzaldehyde, reactions
                22042-73-5, 4-(2-Hydroxyethoxy) benzaldehyde 26153-38-8,
     1194-98-5
     3,5-Dihydroxybenzaldehyde 27913-86-6, 4-(Bis(2-hydroxyethyl)amino)
                   51980-54-2, 4-Pyrrolidinobenzaldehyde 58028-76-5,
     benzaldehyde
     2-Morpholino benzaldehyde 70547-87-4, 2,6-Dimethyl-4-hydroxybenzaldehyde
     71026-66-9, Carbamic acid, (4-aminophenyl)-, 1,1-dimethylethyl ester
                   325953-40-0, Carbamic acid, (4-amino-, 2-methylphenyl)-,
     1,1-dimethylethyl ester
                               325953-41-1, Carbamic acid, (4-amino-,
     3-methylphenyl)-, 1,1-dimethylethyl ester
                                                 325953-45-5
     402826-41-9
                   402826-43-1
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (synthesis of N-heteroarylmethyl-p-phenylendiamine derivs. and
        application in oxidative hair dyes as developers)
TΤ
     71411-90-0 402826-44-2 402826-47-5
     402826-49-7 402826-50-0 402826-51-1
     402826-52-2 402826-53-3
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (synthesis of N-heteroarylmethyl-p-phenylendiamine derivs. and
        application in oxidative hair dyes as developers)
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RN 71411-90-0 HCAPLUS

CN 1,4-Benzenediamine, N-[(4-aminophenyl)methyl]- (9CI) (CA INDEX NAME)

RN 402826-44-2 HCAPLUS

CN Phenol, 3-[[(4-aminophenyl)amino]methyl]- (9CI) (CA INDEX NAME)

RN 402826-47-5 HCAPLUS

CN Phenol, 2-[[(4-aminophenyl)amino]methyl]- (9CI) (CA INDEX NAME)

RN 402826-49-7 HCAPLUS

CN Phenol, 4-[[(4-aminophenyl)amino]methyl]-2,6-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{HO} \\ \text{Me} \end{array}$$

RN 402826-50-0 HCAPLUS

CN Ethanol, 2-[4-[[(4-aminophenyl)amino]methyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 402826-51-1 HCAPLUS

CN 1,4-Benzenediamine, N-(1,3-benzodioxol-5-ylmethyl)- (9CI) (CA INDEX NAME)

$$^{\text{H}_{2}\text{N}}$$
 $^{\text{O}}$ $^{\text{O}}$

RN 402826-52-2 HCAPLUS

CN Acetamide, N-[4-[[(4-aminophenyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 402826-53-3 HCAPLUS

CN 1,4-Benzenediamine, N-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

IT 5711-79-5P 13174-43-1P 17272-83-2DP, N-Benzyl-p-phenylenediamine, derivs. 17272-83-2P 402825-55-2P 402825-56-3P 402825-57-4P 402825-58-5P 402825-59-6P 402825-60-9P 402825-61-0P 402825-62-1P 402825-63-2P 402825-64-3P 402825-65-4P 402825-66-5P 402825-67-6P 402825-68-7P 402825-69-8P 402825-70-1P 402825-71-2P 402825-72-3P 402825-73-4P 402825-74-5DP, derivs. 402825-75-6DP, derivs. 402825-76-7P 402825-77-8P 402825-78-9P 402825-79-0P 402825-80-3P 402825-81-4P 402825-83-6P 402825-84-7P 402825-86-9P 402825-90-5P 402825-91-6P 402825-92-7P 402825-94-9P 402825-95-0P 402825-96-1P 402825-97-2P 402825-98-3P 402825-99-4P 402826-00-0P 402826-01-1P 402826-02-2P 402826-03-3P 402826-04-4P 402826-05-5P 402826-06-6P 402826-07-7P 402826-08-8P 402826-09-9P 402826-10-2P 402826-11-3P 402826-12-4P 402826-13-5P 402826-14-6DP, derivs. 402826-15-7DP, derivs. 402826-16-8P 402826-17-9P 402826-18-0P 402826-19-1P 402826-20-4P 402826-21-5P 402826-22-6P 402826-23-7P 402826-24-8P 402826-25-9P 402826-26-0P 402826-27-1P 402826-28-2P 402826-29-3P 402826-30-6P 402826-31-7P 402826-32-8P 402826-33-9P 402826-34-0P 402826-35-1P 402826-36-2P

402826-38-4P 402826-39-5P 402826-40-8P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of N-heteroarylmethyl-p-phenylendiamine derivs. and application in oxidative **hair** dyes as developers)

RN 5711-79-5 HCAPLUS

CN 1,4-Benzenediamine, N-[[4-(dimethylamino)phenyl]methyl]- (9CI) (CA INDEX NAME)

RN 13174-43-1 HCAPLUS

CN Phenol, 4-[[(4-aminophenyl)amino]methyl]- (9CI) (CA INDEX NAME)

RN 17272-83-2 HCAPLUS

CN 1,4-Benzenediamine, N-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 17272-83-2 HCAPLUS

CN 1,4-Benzenediamine, N-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 402825-55-2 HCAPLUS

CN Phenol, 3-[[(4-aminophenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 402825-56-3 HCAPLUS

CN Ethanol, 2-[4-[[(4-aminophenyl)amino]methyl]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{CH}_2\text{-NH} \\ & \text{NH}_2 \end{array}$$

HC1

RN 402825-57-4 HCAPLUS

CN Acetamide, N-[4-[[(4-aminophenyl)amino]methyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 402825-58-5 HCAPLUS

CN Phenol, 4-[[(4-aminophenyl)amino]methyl]-2,6-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{HO} \\ \text{Me} \end{array}$$

HC1

RN 402825-59-6 HCAPLUS

CN 1,4-Benzenediamine, N-(1,3-benzodioxol-5-ylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$H_2N$$
 $NH-CH_2$

HCl

RN 402825-60-9 HCAPLUS

CN 1,4-Benzenediamine, N-[(4-aminophenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$H_2N$$
 CH_2-NH NH_2

● HCl

RN 402825-61-0 HCAPLUS

CN 1,4-Benzenediamine, N-[(2-aminophenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 402825-62-1 HCAPLUS

CN 1,4-Benzenediamine, N-[(2-methoxyphenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 402825-63-2 HCAPLUS

CN 1,2-Benzenediol, 4-[[(4-aminophenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 402825-64-3 HCAPLUS

CN 1,3-Benzenediol, 5-[[(4-aminophenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 402825-65-4 HCAPLUS

CN 1,3-Benzenediamine, 5-[[(4-aminophenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \mathbf{H_2N} & & \\ & \mathbf{CH_2-NH} \\ & \mathbf{NH_2} \end{array}$$

RN 402825-66-5 HCAPLUS

CN 1,4-Benzenediamine, N-[(4-methoxyphenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 402825-67-6 HCAPLUS

CN Phenol, 4-amino-2-[[(4-aminophenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 402825-68-7 HCAPLUS

CN 1,4-Benzenediamine, N-[[4-(1-pyrrolidinyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

RN 402825-69-8 HCAPLUS

CN Ethanol, 2,2'-[[4-[[(4-aminophenyl)amino]methyl]phenyl]imino]bis-, monohydrochloride (9CI) (CA INDEX NAME)

$$CH_2-NH$$
 $HO-CH_2-CH_2$
 $HO-CH_2-CH_2$

HCl

RN 402825-70-1 HCAPLUS

CN 1,4-Benzenediamine, N-[(4-nitrophenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$O_2N$$
 CH_2-NH NH_2

● HCl

RN 402825-71-2 HCAPLUS

CN 1,4-Benzenediol, 2-[[(4-aminophenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 402825-72-3 HCAPLUS

CN 1,4-Benzenediamine, N-[(2,4-dinitrophenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 402825-73-4 HCAPLUS

CN 1,4-Benzenediamine, N-[[2-(4-morpholinyl)phenyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$R-N$$

HCl

RN 402825-74-5 HCAPLUS

CN 1,4-Benzenediamine, 2-methyl-N1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 402825-75-6 HCAPLUS CN 1,4-Benzenediamine, 2-methyl-N4-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 402825-76-7 HCAPLUS
CN 1,4-Benzenediamine, N1-[(4-aminophenyl)methyl]-2-methyl-,
 monohydrochloride (9CI) (CA INDEX NAME)

● HCl

$$\begin{array}{c} \text{Me} \\ \\ \text{H}_2 \text{N} \end{array}$$

● HCl

RN 402825-78-9 HCAPLUS

CN Phenol, 4-amino-2-[[(4-amino-2-methylphenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 402825-79-0 HCAPLUS

CN Phenol, 4-amino-2-[[(4-amino-3-methylphenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 402825-80-3 HCAPLUS

CN 1,4-Benzenediamine, N1-[(2-methoxyphenyl)methyl]-2-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 402825-81-4 HCAPLUS

CN 1,4-Benzenediamine, N4-[(2-methoxyphenyl)methyl]-2-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{NH-CH}_2 \\ \text{H}_2 \text{N} \end{array}$$

● HCl

$$\begin{array}{c|c} \text{Me} & \text{NH-} \text{CH}_2 \\ \\ \text{H}_2 \text{N} & \end{array}$$

● HCl

$$Me$$
 $NH-CH_2$
 OH

RN 402825-90-5 HCAPLUS

CN Phenol, 3-[[(4-amino-3-methylphenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{NH- CH}_2 \\ \\ \text{H}_2 \text{N} \end{array}$$

HCl

RN 402825-91-6 HCAPLUS

CN 1,4-Benzenediamine, N1-[(4-methoxyphenyl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{NH-CH}_2 \\ \\ \text{OMe} \end{array}$$

RN 402825-92-7 HCAPLUS

CN 1,4-Benzenediamine, N4-[(4-methoxyphenyl)methyl]-2-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ \text{H}_2 \text{N} \end{array} \qquad \begin{array}{c} \text{NH-CH}_2 \\ \\ \text{OMe} \end{array}$$

HC1

RN 402825-94-9 HCAPLUS

CN 1,3-Benzenediamine, 5-[[(4-amino-2-methylphenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$H_2N$$
 CH_2-NH
 NH_2

HCl

RN 402825-95-0 HCAPLUS

CN 1,3-Benzenediamine, 5-[[(4-amino-3-methylphenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 402825-96-1 HCAPLUS

CN Ethanol, 2-[4-[[(4-amino-2-methylphenyl)amino]methyl]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

$$H_2N$$

Me

 $O-CH_2-CH_2-OH$

● HCl

RN 402825-97-2 HCAPLUS

CN Ethanol, 2-[4-[[(4-amino-3-methylphenyl)amino]methyl]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ \text{H}_2 \text{N} \\ \end{array} \\ \begin{array}{c} \text{O-CH}_2\text{-CH}_2\text{-OH} \\ \end{array}$$

HCl

RN 402825-98-3 HCAPLUS

CN Ethanol, 2,2'-[[4-[[(4-amino-2-methylphenyl)amino]methyl]phenyl]imino]bis-(9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{H}_2\text{N} \\ \\ \text{N-CH}_2\text{-CH}_2\text{-OH} \\ \\ \text{CH}_2\text{-CH}_2\text{-OH} \\ \end{array}$$

RN 402825-99-4 HCAPLUS

CN Ethanol, 2,2'-[[4-[[(4-amino-3-methylphenyl)amino]methyl]phenyl]imino]bis-(9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{H}_2\text{N} \\ \\ \text{N-CH}_2\text{-CH}_2\text{-OH} \\ \\ \text{CH}_2\text{-CH}_2\text{-OH} \\ \end{array}$$

RN 402826-00-0 HCAPLUS

CN 1,4-Benzenediamine, N1-[(2-aminophenyl)methyl]-2-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{NH-CH}_2 \\ \text{H}_2 \text{N} \end{array}$$

● HCl

RN 402826-01-1 HCAPLUS

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CN 1,4-Benzenediamine, N4-[(2-aminophenyl)methyl]-2-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 402826-02-2 HCAPLUS

CN 1,4-Benzenediol, 2-[[(4-amino-2-methylphenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$CH_2-NH$$
OH
 NH_2

● HCl

RN 402826-03-3 HCAPLUS

CN 1,4-Benzenediol, 2-[[(4-amino-3-methylphenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 402826-04-4 HCAPLUS

CN 1,4-Benzenediamine, 2-methyl-N1-[(4-nitrophenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$Me$$
 $NH-CH_2$
 NO_2

$$\begin{array}{c} \text{Me} \\ \\ \text{H}_2 \text{N} \end{array} \qquad \begin{array}{c} \text{NH} - \text{CH}_2 \\ \\ \text{NO}_2 \end{array}$$

HCl

● HCl

RN 402826-08-8 HCAPLUS

CN Phenol, 4-[[(4-amino-2-methylphenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ \text{NH-CH}_2 \\ \\ \text{OH} \end{array}$$

HCl

RN 402826-09-9 HCAPLUS

CN Phenol, 4-[[(4-amino-3-methylphenyl)amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$Me$$
 $NH-CH_2$
 OH

● HCl

RN 402826-10-2 HCAPLUS

CN 1,4-Benzenediamine, 2-methyl-N1-[[2-(4-morpholinyl)phenyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 402826-11-3 HCAPLUS

CN 1,4-Benzenediamine, 2-methyl-N4-[[2-(4-morpholinyl)phenyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$R-N$$

HCl

RN 402826-12-4 HCAPLUS

CN 1,4-Benzenediamine, N1-[[4-(dimethylamino)phenyl]methyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 402826-13-5 HCAPLUS

CN 1,4-Benzenediamine, N4-[[4-(dimethylamino)phenyl]methyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{H}_2\text{N} \\ \end{array}$$

RN 402826-14-6 HCAPLUS

CN Benzeneethanol, 5-amino-2-[(phenylmethyl)amino]- (9CI) (CA INDEX NAME)

Ph-CH₂-NH
$$CH_2-CH_2-OH$$

$$NH_2$$

RN 402826-15-7 HCAPLUS

CN Benzeneethanol, 2-amino-5-[(phenylmethyl)amino]- (9CI) (CA INDEX NAME)

Ph-CH2-NH

RN 402826-16-8 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[(4-nitrophenyl)methyl]amino]-,
monohydrochloride (9CI) (CA INDEX NAME)

$$H_2N$$
 CH_2-CH_2-OH
 NO_2

● HCl

RN 402826-17-9 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[(4-nitrophenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{HO-CH}_2\text{-CH}_2\\ \\ \text{H}_2\text{N} \end{array} \qquad \begin{array}{c} \text{NH-CH}_2\\ \\ \text{NO}_2 \end{array}$$

RN 402826-18-0 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[(3-aminophenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 402826-19-1 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[(3-aminophenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$H_2N$$
 $HO-CH_2-CH_2$
 $NH-CH_2$

● HCl

RN 402826-20-4 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[(4-aminophenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$HO-CH_2-CH_2$$
 H_2N
 $NH-CH_2$
 NH_2

HCl

RN 402826-21-5 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[(4-aminophenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$HO-CH_2-CH_2$$
 H_2N
 $NH-CH_2$
 NH_2

HCl

RN 402826-22-6 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[(4-methoxyphenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$HO-CH_2-CH_2$$
 H_2N
 $NH-CH_2$
OMe

● HCl

RN 402826-23-7 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[(4-methoxyphenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{HO-CH}_2\text{-CH}_2\\ \\ \text{H}_2\text{N} \end{array} \qquad \text{NH-CH}_2 \\ \\ \text{OMe} \\ \end{array}$$

● HCl

RN 402826-24-8 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[[4-[bis(2-hydroxyethyl)amino]phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

$$HO-CH_2-CH_2$$
 H_2N
 $N-CH_2-CH_2-OH$
 CH_2-CH_2-OH

RN 402826-25-9 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[[4-[bis(2-hydroxyethyl)amino]phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

RN 402826-26-0 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[(2-methoxyphenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME).

$$\begin{array}{c} \text{MeO} \\ \text{NH-CH}_2 \\ \\ \text{CH}_2\text{-CH}_2\text{-OH} \end{array}$$

● HCl

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RN 402826-27-1 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[(2-methoxyphenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 402826-28-2 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[(2-aminophenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 402826-29-3 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[(2-aminophenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$HO-CH_2-CH_2$$
 H_2N
 H_2N
 H_2N

● HCl

RN 402826-30-6 HCAPLUS

CN 1,4-Benzenediol, 2-[[[4-amino-2-(2-hydroxyethyl)phenyl]amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$H_2N$$
 CH_2-CH_2-OH
OH
OH
OH

HCl

RN 402826-31-7 HCAPLUS

CN 1,4-Benzenediol, 2-[[[4-amino-3-(2-hydroxyethyl)phenyl]amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$HO-CH_2-CH_2$$
 H_2N
 $NH-CH_2$
 OH
 OH

● HCl

RN 402826-32-8 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[(5-amino-2-hydroxyphenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$H_2N$$
 CH_2-CH_2-OH
 NH_2

HC1

RN 402826-33-9 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[(5-amino-2-hydroxyphenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$HO-CH_2-CH_2$$
 H_2N
 $NH-CH_2$
 NH_2

● HCl

RN 402826-34-0 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[[2-(4-morpholinyl)phenyl]methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 402826-35-1 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[[2-(4-morpholinyl)phenyl]methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

$$R-N$$

HCl

RN 402826-36-2 HCAPLUS

CN Benzeneethanol, 5-amino-2-[[[4-(dimethylamino)phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH-CH}_2 \\ \\ \text{H}_2\text{N} & \text{CH}_2\text{-CH}_2\text{-OH} \end{array} \\ \text{NMe}_2$$

RN 402826-38-4 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[[4-(dimethylamino)phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{HO-CH}_2\text{-CH}_2\\ \\ \text{H}_2\text{N} \end{array} \text{NH-CH}_2 \\ \\ \text{NMe}_2 \end{array}$$

RN 402826-39-5 HCAPLUS

CN Benzeneethanol, 2-amino-5-[[(3,5-diaminophenyl)methyl]amino]-, monohydrochloride (9CI) (CA_INDEX_NAME)

$$H_2N$$
 CH_2-NH
 NH_2
 CH_2-CH_2-OH

HCl

402826-40-8 HCAPLUS RN

Benzeneethanol, 5-amino-2-[[(3,5-diaminophenyl)methyl]amino]-, CN monohydrochloride (9CI) (CA INDEX NAME)

$$HO-CH_2-CH_2$$
 H_2N
 $NH-CH_2$
 NH_2

● HCl

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 9 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:171639 HCAPLUS

136:236658 DN

TI Primary intermediates for oxidative coloration of hair comprising arylaminomethylaminophenols

Pan, Yuh-guo; Lim, Mu-ill IN

Bristol-Myers Squibb Company, USA PA

PCT Int. Appl., 54 pp. SO

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. APPLICATION NO. KIND DATE 20020307 WO 2001-US25554 WO 2002017866 A1 20010815 PΤ AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,

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BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                       A5
                                                             20010815
     AU 2001088261
                            20020313
                                            AU 2001-88261
                            20030806
                                            EP 2001-967982
                                                             20010815
     EP 1331918
                       Α1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
         R:
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                            US 2001-930651
     US 2002144355
                       Α1
                            20021010
                                                             20010816
                            20030513
     US 6562080
                       B2
                            20000830
PRAI US 2000-229182P
                       P
                            20010815
     WO 2001-US25554
                       W
    MARPAT 136:236658
OS
GΙ
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Primary intermediates useful hair coloring systems comprise 2-arylaminomethyl-4-aminophenols. The invention provides new 2-arylaminomethyl-4-aminophenol compds. of I wherein R is a moiety selected from formulas (a), (b) or (c) wherein R1, R2, R3, R4 and R5 are each independently selected from a hydrogen atom, a halogen atom, a hydroxy group, an amino group, a C1-6 alkyl or haloalkyl group, a C1-6 alkoxy or haloalkoxy group, and a nitrile group, and R6 is a hydrogen atom, a halogen atom, a C1-4 alkyl or a C1-4 alkoxy group. Formulation of a hair dye contg. a 4-(5-amino-2-hydroxybenzylamino)-benzonitrile, 2-aminophenol, and resorcinol is disclosed.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 25

ST oxidative hair coloration arylaminomethyl aminophenol

IT Hair preparations

(dyes, oxidative; primary intermediates for oxidative coloration of hair comprising arylaminomethylaminophenols)

IT Oxidizing agents

(primary intermediates for oxidative coloration of hair comprising arylaminomethylaminophenols)

IT 90-15-3, Naphthalen-1-ol 95-70-5, 2-MethylBenzene-1,4-diamine 4-ChloroBenzene-1,3-diol 106-50-3, Benzene-1, 4-diamine, biological 108-46-3, Benzene-1,3-diol, biological studies studies 123-30-8, 591-27-5 4-Aminophenol 608-25-3 1004-74-6, Pyrimidinetetramine 2380-86-1, 1H-Indol-6-ol 2835-95-2 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-Methylphenol 7469-77-4, 2-Methylnaphthalen-1-ol 16867-03-1, 2-Aminopyridin-3-ol 17672-22-9, 2-Amino-6-methylphenol 26021-57-8, 3,4-Dihydro-2H-1,4-benzoxazin-6-ol 41927-22-4 53222-92-7 55302-96-0 70643-19-5 93841-24-8, 2-(2,5-Diamino-phenyl)-ethanol 94082-77-6 129697-50-3 155601-17-5 220264-60-8 307493-94-3 402940-52-7 329320-36-7 402940-53-8 402940-54-9 402940-55-0 402940-56-1 402940-57-2 402940-58-3 402940-59-4 402940-60-7

ELHILO 10/049667 8/18/03 Page 43 402940-63-0 402940-64-1 402940-65-2 402940-61-8 402940-62-9 402940-70-9 402940-66-3 402940-67-4 402940-68-5 402940-69-6 402940-72-1 402940-73-2 402940-74-3 402940-75-4 402940-71-0 402940-78-7 402940-79-8 402940-80-1 402940-76-5 402940-77-6 402940-82-3 402940-83-4 402940-84-5 402940-85-6 402940-81-2 402940-87-8 402940-88-9 402940-89-0 402940-90-3 402940-86-7 402940-94-7 402940-95-8 402940-91-4 402940-92-5 402940-93-6 402940-99-2 402940-97-0 402940-98-1 402940-96-9 402941-00-8 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (primary intermediates for oxidative coloration of hair comprising arylaminomethylaminophenols) IT 402940-96-9 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (primary intermediates for oxidative coloration of hair comprising arylaminomethylaminophenols) RN402940-96-9 HCAPLUS Phenol, 4-amino-2-[[(4-aminophenyl)amino]methyl]- (9CI) (CA INDEX NAME) CN

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:729678 HCAPLUS

DN 135:288587

TI Aminomethyl-m-dihydroxybenzene derivatives and coloring agents for keratin fibers containing these compounds

PA Wella AG, Germany

SO Ger. Gebrauchsmusterschrift, 35 pp.

CODEN: GGXXFR

DT Patent LA German

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI DE 20110356 U1 20011004 DE 2001-20110356 20010622

PRAI DE 2001-20110356 20010622

OS MARPAT 135:288587

GI

Aminomethyl-m-dihydroxybenzene derivs. I [R1, R2 = H, C1-2 alkoxy, C1-6 AΒ alkyl, C3-6 alkenyl, C2-4 hydroxyalkyl, C3-4 dihydroxyalkyl, C2-4 aminoalkyl, C2-4 dimethylaminoalkyl, C2-4 acetylaminoalkyl, C2-4 methoxyalkyl, C2-4 ethoxyalkyl, C1-4 cyanoalkyl, C1-4 aminocarbonylalkyl, pyridylmethyl, furfuryl, thienylmethyl, substituted pyridyl, (un) substituted phenylmethyl or -Et, or R1 and R2 together with the N atom form a ring, including (un) substituted piperidino, morpholino, piperazino, pyrrolidino; R3 = H, C1-4 alkyl; preferably, R3 = H and/or one of R1 or R2 = C2-4 hydroxyalkyl, 3,4-methylenedioxyphenyl, Ph] or their physiol. compatible, water-sol. salts, useful as couplers in oxidative hair dyes based on a developer substance-coupling substance combination in one suitable cosmetic carrier, are claimed. In examples given, compds. I are formulated with one or more known developer substances and one or more known addnl. coupling substances to give various shades of color when applied to hair; e.g., a prepn. contg. 0.20 g 1,3-dihydroxy-(4-phenylaminomethyl)benzene (prepn. given) 0.15 g 1,4-benzenediamine, 0.30 g 3-methyl-4-aminophenol and 0.30 1-naphthol (formulation given) afforded red-brown hair.

IC ICM C07C215-46 ICS A61K007-13

- CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds) Section cross-reference(s): 62
- ST dihydroxybenzene deriv prepn hair dye component; coupling substance oxidative hair dye dihydroxybenzene
- IT Hair preparations

(dyes, oxidative; dihydroxybenzene derivs. as coupling substances in)

IT Cosmetics

Hair

(prepn. of dihydroxybenzene derivs. and their use as coupling agents in oxidative hair dyes contg. developer-coupler substance combinations)

IT Keratins

RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)

(prepn. of dihydroxybenzene derivs. and their use as coupling agents in oxidative hair dyes contg. developer-coupler substance combinations)

IT Hydroquinones

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of dihydroxybenzene derivs. and their use as coupling agents in oxidative hair dyes contg. developer-coupler substance combinations)

IT 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-

89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, pyrazolone 91-56-5, 2,3-Indolinedione 91-68-9, 3-(Diethylamino)phenol 1-Naphthol 95-88-5, 1-Chloro-2, 4-dihydroxybenzene 92-44-4, 2,3-Dihydroxynaphthalene 99-07-0, 3-(Dimethylamino)phenol 108-45-2, 1,3-Diaminobenzene, biological studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 137-19-9, 1,5-Dichloro-2,4-dihydroxybenzene 141-86-6, 533-31-3, 3,4-Methylenedioxyphenol 575-38-2, 2,6-Diaminopyridine 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 1,7-Dihydroxynaphthalene 608-25-3, 1,3-Dihydroxy-2-methylbenzene 619-05-6, 3-Aminophenol 770-25-2, 3-[(2-Hydroxyethyl)amino]phenol 3,4-Diaminobenzoic acid 1687-53-2, 5-Amino-2-methoxyphenol 1953-54-4, 5-Hydroxyindole 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 2835-95-2 3131-52-0, 5,6-Dihydroxyindole 4-Hydroxyindole 2,4-Diamino-1-methoxy-5-methylbenzene 5697-02-9, 1-Acetoxy-2methylnaphthalene 6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene 7228-00-4 7469-77-4, 2-Methyl-1-naphthol 16867-03-1, 2-Amino-3-hydroxypyridine 26011-57-4, 6-Amino-3,4-dihydro-1,4(2H)-benzoxazine 26021-57-8, 3,4-Dihydro-6-hydroxy-1,4(2H)-benzoxazine 26455-21-0, N-[(3-Dimethylamino)phenyl]urea 28020-38-4, 2,3-Diamino-6-29539-03-5, 5,6-Dihydroxyindoline 39489-79-7 prophenol 53222-92-7, 3-Amino-2-methylphenol methoxypyridine 39489-79-7, 5-Amino-2,4-dichlorophenol 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-methylphenol 61693-42-3, 3-Amino-2,4-dichlorophenol 70643-19-5, 2,4-Diamino-1-(2hydroxyethoxy) benzene 71005-35-1 71077-37-7, 1,3-Diamino-4-(2methoxyethoxy) benzene 71500-41-9, 4-Amino-2-[bis(2-hydroxyethyl)amino]-1-71500-42-0, 3-[Bis(2-hydroxyethyl)amino]aniline ethoxybenzene 75513-65-4, 1,3-Diamino-4-(2,3-dihydroxypropoxy)benzene 74918-21-1 76045-64-2, 3-[(2-Aminoethyl)amino]aniline 78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-methylaminobenzene 80592-80-9, 3-[(2,3-Dihydroxypropyl)amino]-2-methylphenol 80592-81-0, 3-[(2-Hydroxyethyl)amino]-2-methylphenol 81892-72-0, 1,3-Bis(2,4-diaminophenoxy)propane 83763-47-7, 2-Amino-4-[(2hydroxyethyl)amino]anisole 84540-47-6, 2,6-Dihydroxy-3,4-84540-48-7, 2,4-Diaminophenoxyacetic acid dimethylpyridine 84540-50-1, 3-Amino-2-chloro-6-methylphenol 85679-78-3, 3,5-Diamino-2,6dimethoxypyridine 86817-42-7, 2-(4-Amino-2-hydroxyphenoxy)ethanol 90817-34-8, 3-Amino-6-methoxy-2-(methylamino)pyridine 94082-77-6, 2,4-Diamino-1,5-bis(2-hydroxyethoxy)benzene 94158-14-2 104752-50-3, 1-(2-Aminoethoxy)-2,4-diaminobenzene 104752-51-4, 1,2-Dichloro-3,5dihydroxy-4-methylbenzene 110102-86-8, 5-Amino-4-chloro-2-methylphenol 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 111451-24-2 122455-85-0, 5-Amino-4-fluoro-2-methylphenol 137290-78-9, 5-Amino-4-methoxy-2methylphenol 137290-86-9, 5-[(2-Hydroxyethyl)amino]-4-methoxy-2methylphenol 139443-57-5, 5-Amino-4-ethoxy-2-methylphenol 141614-04-2, 2,4-Diamino-1-ethoxy-5-methylbenzene 141614-05-3, 2,4-Diamino-1-(2hydroxyethoxy)-5-methylbenzene 141922-20-5, 2,4-Diamino-1-fluoro-5-142082-56-2, 3-[(2-Methoxyethyl)amino]phenol methylbenzene 146658-65-3 149330-25-6, 2,6-Bis[(2-hydroxyethyl)amino]toluene 164919-03-3 207923-07-7, 5-Amino-2-ethylphenol 244028-58-8, 2,4-Bis[(2-hydroxyethyl)amino]-1,5-dimethoxybenzene 244028-59-9, 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxole 307493-94-3 364366-19-8 364366-20-1 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (addnl. coupling substance component in oxidative hair dye based on developer-coupling substance combination contg. dihydroxybenzene derivs.)

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ΙT
     123-30-8, 4-Aminophenol
     RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
     study); RACT (Reactant or reagent); USES (Uses)
        (amidation by, of protected (diaminophenyl)acrylic acid derivs. and use
        as developer substance component in oxidative hair dyes)
IT
     14268-66-7, 3,4-Methylenedioxyaniline
     RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
     study); RACT (Reactant or reagent); USES (Uses)
        (amination of dihydroxybenzaldehyde by and use as addnl. coupling
        substance component in oxidative hair dyes)
                                             364365-62-8
                                                           364365-63-9
TΤ
     94564-78-0
                 150268-63-6
                               364365-60-6
                                              364365-67-3
                                                            364365-68-4
     364365-64-0
                  364365-65-1
                                364365-66-2
     364365-70-8
                  364365-72-0
                                364365-74-2
                                              364365-75-3
                                                            364365-76-4
     364365-77-5
                  364365-78-6
                                364365-80-0
                                              364365-82-2
                                                            364365-83-3
     364365-84-4
                  364365-85-5
                                364365-86-6
                                              364365-87-7
                                                            364365-88-8
                  364365-92-4
                                364365-93-5
                                              364365-94-6
                                                            364365-95-7
     364365-91-3
                                                            364366-01-8
     364365-96-8
                  364365-97-9
                                364365-99-1
                                              364366-00-7
                  364366-04-1
     364366-02-9
                                364366-05-2
                                              364366-06-3
                                                            364366-08-5
     364367-06-6
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (coupling substance component in oxidative hair dye based on
       developer-coupling substance combination contg. dihydroxybenzene
       derivs.)
ΙT
     2835-98-5, 2-Amino-5-methylphenol
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (developer and addnl. coupling substance components in oxidative
       hair dyes)
                                     92-65-9, 4-[N-Ethyl-N-(2-
IT
     89-57-6, 5-Aminosalicylic acid
     hydroxyethyl)amino]aniline 93-05-0, 4-(Diethylamino)aniline
                                                                     95-55-6,
                    95-70-5, 1,4-Diamino-2-methylbenzene
                                                          101-54-2,
     2-Aminophenol
     4-(Phenylamino)aniline 106-50-3, 1,4-Diaminobenzene, biological studies
                                     399-95-1, 4-Amino-3-fluorophenol
     150-75-4, 4-(Methylamino)phenol
     399-96-2, 4-Amino-2-fluorophenol 533-73-3, 1,2,4-Trihydroxybenzene
     615-66-7, 1,4-Diamino-2-chlorobenzene 1004-74-6, 2,4,5,6-
                          1004-75-7, 2,5,6-Triamino-4(1H)pyrimidinone
     Tetraaminopyrimidine
                2359-52-6, 4-[Bis(2-hydroxyethyl)amino]-2-methylaniline
     1630-11-1
     2835-96-3, 4-Amino-2-methylphenol 2835-99-6, 4-Amino-3-methylphenol
     4318-76-7, 2,5-Diaminopyridine 5306-96-7, 1,4-Diamino-2,3-
                     5862-80-6, 4-[(2,3-Dihydroxypropyl)amino]aniline
     dimethylbenzene
     6369-59-1
                6393-01-7, 1,4-Diamino-2,5-dimethylbenzene
                                                             7218-02-2
     7575-35-1, 4-[Bis(2-hydroxyethyl)amino]aniline
                                                    17672-22-9,
                            29785-47-5, 4-Amino-2-(methoxymethyl)phenol
     2-Amino-6-methylphenol
     45514-38-3, 4,5-Diamino-1-methyl-1H-pyrazole 58262-44-5
                                                                 66566-48-1,
                                       67199-87-5, 1,4-Diamino-2-
     4-[(2-Methoxyethyl)amino]aniline
     (aminomethyl)benzene
                          73793-80-3, 1,4-Diamino-2-(hydroxymethyl)benzene
     79352-72-0, 4-Amino-2-(aminomethyl)phenol
                                                93841-24-8,
     1,4-Diamino-2-(2-hydroxyethyl)benzene
                                            97902-52-8, 1,4-Diamino-2-(1-
     methylethyl)benzene
                          104333-08-6
                                       104333-09-7, 4-Amino-2-
     (hydroxymethyl)phenol
                            104752-48-9, 4-[(3-Hydroxypropyl)amino]aniline
     105293-89-8, 4-(Dipropylamino)aniline
                                            109942-17-8, [1,1'-Biphenyl]-2,5-
              110952-46-0, 4-Amino-2-[(2-hydroxyethyl)amino]methylphenol
     126335-43-1, 1,4-Diamino-2-(2-hydroxyethoxy)benzene
                                                         128729-30-6,
     1,3-Bis[(4-aminophenyl)(2-hydroxyethyl)amino]-2-propanol
                                                                130582-53-5,
                                                        155601-16-4,
     1,4-Bis[(4-aminophenyl)amino]butane
                                         135043-64-0
     4,5-Diamino-1-(1-methylethyl)-1H-pyrazole 155601-17-5,
     4,5-Diamino-1-(2-hydroxyethyl)-1H-pyrazole 157469-54-0,
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4,5-Diamino-1-[(4-methylphenyl)methyl]-1H-pyrazole 157469-55-1
     159621-77-9 159661-45-7, 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane
     168202-61-7, 4-Amino-3-(hydroxymethyl)phenol
                                                  207568-58-9,
     2-(2-(Acetylamino)ethoxy)-1,4-diaminobenzene
                                                  244104-61-8,
     1,4-Diamino-2-(2-thienyl)benzene 246244-41-7, 1,4-Diamino-2-(3-
     thienyl)benzene 306959-12-6, 1,4-Diamino-2-(3-pyridyl)benzene
     329320-36-7, 1,4-Diamino-2-(1-hydroxyethyl)benzene
                                                         337906-36-2,
    .1,4-Diamino-2-methoxymethylbenzene 364343-79-3
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (developer substance component in oxidative hair dye based on
        developer-coupling substance combination)
     6358-09-4, 2-Amino-6-chloro-4-nitrophenol
TΤ
     2-Chloro-6-(ethylamino)-4-nitrophenol
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (directly absorbable dye component in oxidative hair dye
       prepn.)
                                                                 364366-14-3P
TT
     364366-09-6P
                   364366-11-0P
                                  364366-12-1P
                                                  364366-13-2P
     364366-15-4P 364366-16-5P
                                364366-17-6P
                                                364366-18-7P
     364366-21-2P
                  364366-22-3P
                                  364366-23-4P
                                                  364366-24-5P
                                                                 364366-25-6P
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of, as coupling substance component in oxidative hair
        dye based on developer-coupling substance combination contg.
        dihydroxybenzene derivs.)
IT
     364366-16-5P
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of, as coupling substance component in oxidative hair
        dye based on developer-coupling substance combination contg.
        dihydroxybenzene derivs.)
RN
     364366-16-5 HCAPLUS
CN
     1,3-Benzenediol, 4-[[(4-aminophenyl)amino]methyl]- (9CI) (CA INDEX NAME)
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L10 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ΑN
     2001:524685 HCAPLUS
DN
     135:111699
TI
     Hair dyes containing 2-aminoalkyl-1,4-diaminobenzene derivatives
     Chassot, Laurent; Baun, Hans-Jurgen
PA
     Wella Aktiengesellschaft, Germany
SO
     Eur. Pat. Appl., 31 pp.
     CODEN: EPXXDW
DT
     Patent
T.A
     German
FAN.CNT 2
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
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